product information

Surface Solutions

Magnesium Fluoride pieces Optipur®

GENERAL INFORMATION

Magnesium Fluoride Optipur® is a high purity salt that is ideally suited as a precursor material to grow single crystals from. These single crystals have very high optical transmittance over a wide spectral range from 110 nm to 7.5 µm and can thus be used as optical elements for IR, VUV and laser applications.

AREAS OF APPLICATION

- Due to their low levels of impurities and thus the lack of color centers, single crystals made with Magnesium Fluoride Optipur® can be used as blanks and optical windows for DUV, UV, Vis and IR in many optical applications, especially in high intensity laser applications and spectroscopy.
- The transparency of MgF_2 in the UV exceeds that of BaF_2 and CaF_2 making the material ideally suited for UV excimer windows and projection lens applications.

PRODUCTS

Article No.	Description	Formula	Purity*	Package	Appearance
116715	Magnesium Fluoride pieces Optipur®	MgF_2	3N	25 kg	colorless chunks

* The purity value is based on the specified trace metals. For further information, please read the quality statement at www.optipur.com.

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SPECIFICATION

Ca (Calcium)	≤ 200	ppm
Co (Cobalt)	≤ 5	ppm
Cr (Chromium)	≤ 10	ppm
Cu (Copper)	≤ 5	ppm
Fe (Iron)	≤ 10	ppm
K (Potassium)	≤ 20	ppm
Mn (Manganese)	≤ 10	ppm
Mo (Molybdenum)	≤ 10	ppm
Ni (Nickel)	≤ 5	ppm
V (Vanadium)	≤ 10	ppm
O (Oxygen)	≤ 400	ppm

RoHS information

Cd (Cadmium)	≤ 0.01	%
Hg (Mercury)	≤ 0.1	%
Pb (Lead)	≤ 0.1	%
PBB (polybrominated biphenyls)	≤ 0.1	%
PBDE (polybrominated diphenyls ethers)	≤ 0.1	%

The Chromium (VI) concentration (RoHS requirement: ≤ 0.1 %) is always smaller than or equal to the total chromium concentration.

Should you have further specific requirements, please contact us.

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Quality assurance

Research, production and sales of our Patinal® evaporation materials take place under a certified DIN EN ISO 9001 quality management system and DIN EN ISO 14001 environmental management system. The quality of the materials is assured by our manufacturing processes, in-process controls and quality tests. Each batch is released only after passing our chemical analysis and application tests designed to confirm the suitability of the material for the evaporation process.

Handling precautions

Product safety information required for safe use is not included in this document. Before handling, read product and safety sheets and container labels for safe use, physical and health hazard information. The material safety data sheet is available online at www.patinal.com, from your EMD representative or distributor, or by calling your global Merck KGaA, Darmstadt, Germany, contact.

Disclaimer

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